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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/053,650	04/02/1998	KWANG CHEOL JOO	03586.0013	1592

7590

12/20/2001

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EXAMINER

BROWN, RUEBEN M

ART UNIT

PAPER NUMBER

2611

DATE MAILED: 12/20/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/053,650

Applicant(s)

JOO, ET AL

Examiner

Brown M. Reuben

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 09 May 1998.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 27-52 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 27-52 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 02 April 1998 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4,5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities:

On page 7, line 8, the disclosed element, 'RAM 260', should be replaced with 'microprocessor 260'.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 27-52 are rejected under 35 U.S.C. 102(e) as being anticipated by Metz, (U.S. Pat # 5,666,293).

Considering claim 27, the claimed downloading apparatus for a broadcast receiver, comprising a receiver, which receives a broadcast signal having a video program, and a control information signal, reads on the operation of Metz, (Abstract; Fig. 6; col. 7, lines 62-67). Metz teaches that a set top terminal DET 102 receives broadcast video programming, as well as software applications such as for an operating system.

As for the claimed storage element that stores a control program that controls the operation of the video program, such a control program reads on the operation of the operating system disclosed in Metz, col. 4, lines 7-15. The claimed microcontroller, which updates the control program in the storage element, is met by the operation of CPU 105, col. 9, lines 8-10 & col. 17, lines 39-50.

Considering claims 28, 34, 39, 45 & 49, wherein the broadcast signal includes a PID in order to identify the type of information of the broadcast signal, Metz teaches such a feature, col. 14, lines 18-35 & col. 36, lines 54-56.

Considering claims 29, 35, 40, & 50, the DET 102 of Metz includes RAM 122, for temporarily storing downloaded software, col. 10, lines 1-15.

Considering claims 30 & 46, Metz discloses storage space for storing a version number of the control program, col. 9, lines 55-60. Metz also discloses storing and utilizing a downloading program, col. 9, lines 20-54. Moreover Metz teaches that the downloaded control program is stored in the memory of the DET 102, col. 8, lines 12-14 & col. 10, lines 1-5.

Considering claims 31, 36, 41, 44 & 51, Metz also utilizes flash memory, col. 8, lines 9-12 & 17, lines 44-46.

Considering claim 32, the claimed processor for separating the control information signal from the broadcast signal reads on the disclosure of Metz, which teaches extracting the downloaded program from the transmission stream, col. 10, lines 1-5.

Considering claim 33, the claimed elements of a downloading apparatus, which corresponds with subject matter mentioned above in the rejection of claim 27, are likewise analyzed. The claimed first storage element, which temporarily stores control information representing a new control program, reads on Metz, col. 10, lines 1-15; col. 17, lines 50-55 & col. 38, lines 10-19. The above passages teach that the recently downloaded operating system is initially stored in RAM, when the downloading and error checking is complete, the operating system is transferred to a non-volatile memory, which reads on the claimed second memory element which stores the control program. The claimed controller that replaces the control

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program in the second storage element with the new control program also reads on Metz, col. 10, lines 1-15 & col. 38, lines 14-50.

Considering claim 37, the claimed third storage element reads on ROM, disclosed in Metz.

Considering claim 38, the claimed method for downloading a control program from a broadcast signal comprising storing a control program in a first domain of memory, reads on Metz, col. 38, lines 21-26, which teaches that the upgraded operating system may be stored in ROM 115. col. 37, lines 65-67 thru col. 38, line 1. The claimed method of storing a predetermined value corresponding to the stored control program in a second domain reads on col. 36, lines 58-65.

The claimed method of selecting a name of a control program to be downloaded and separating the control program corresponding with the selected program name, reads on identifying the PID of the file, taught in Metz, col. 36, lines 54-60.

The claimed method of replacing the stored control program with the separated control program is met by Metz, col. 38, lines 14-28. The claimed method of replacing the stored predetermined value with a version number corresponding to the replaced control program is inherent in Metz, col. 5, lines 40-51; col. 9, lines 55-65.

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Considering claim 42, in Metz the system downloads a particular upgraded operating system if its version is a certain value, otherwise the system continues to use the previously stored operating system, col. 5, lines 38-50; col. 9, lines 50-67 thru col. 10, lines 1-15 & col. 36, lines 28-55.

Considering claim 43, the claimed method steps correspond with subject matter mentioned above in the rejection of claim 38, and are likewise analyzed.

Considering claim 47, the claimed method steps correspond with subject matter mentioned above in the rejection of claim 38, and are likewise analyzed.

Considering claims 48 & 52, the claimed process of recognizing an abnormal situation and processing the control program in the memory, reads on the operation of Metz, col. 38, lines 40-52. Metz discloses that in the event of a failure to correctly write the operating system in the RAM 122, the system attempts to reload the operating system into flash memory 121.

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's claims.

A) Metz Generic teaching of upgrading operating system according to version numbers.

B) Bacon, Brandenburg Teaches upgrading operating system according to version numbers.

C) Krishnamoorthy Teaches upgrading operating system according to version numbers, and using PID technology.

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Any response to this action should be mailed to:

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or faxed to:

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Or:

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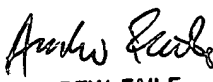
*Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,
Arlington, VA., Sixth Floor (Receptionist).*

Any inquiry concerning this communication or earlier communications from the
examiner should be directed to Brown M. Reuben whose telephone number is (703) 305-2399.
The examiner can normally be reached on M-F (8:30-6:00), First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's
supervisor, Andrew I. Faile can be reached on (703) 305-4380. The fax phone numbers for the
organization where this application or proceeding is assigned is (703) 872-9314 for regular
communications and After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding
should be directed to the receptionist whose telephone number is (703) 305-4700.

Reuben M. Brown


ANDREW FAILE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600